

Amendment and Response
Applicant: Chistyakov
Serial No.: 10/065,739
Page 8 of 18

REMARKS

Pending Claims:

Claims 1, 2, 4-17, and 19-42 are currently pending in the present application. Claims 1, 4, 5, 6, 8, 12, 16, 19, 20, 21, 25, and 27-30 are amended by the present Amendment. Claims 3 and 18 are cancelled without prejudice to Applicant's right to right to pursue these claims in this or a subsequent application. Claims 31-42 are added by the present Amendment. Upon entry of the present Amendment, reconsideration of claims 1, 2, 4-17, and 19-30 and consideration of new claims 31-42 is respectfully requested.

Rejections under 35 U.S.C. §102(b) As Being Anticipated by Kouznetsov:

Claims 1, 3, 6-8, 11-19, 23-25, and 30 are rejected under 35 U.S.C. §102(b) as being anticipated by Kouznetsov (WO98/40532) (hereinafter "Kouznetsov"). Independent claims 1, 16, and 30 are herein amended to more clearly recite the invention.

To anticipate a claim under 35 U.S.C. §102, a single reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught by the reference must be inherently present in the reference. Thus, a claim is anticipated by a reference only if each and every element of the claim is described, either expressly or inherently, in a single prior art reference.

Independent Claim 1 and Dependent Claims 3, 6-8, and 11-15

The Applicant respectfully submits that Kouznetsov does not describe each and every element of independent claim 1 as currently amended. Independent claim 1 has been amended to recite a sputtering source having a power supply that generates a voltage pulse between an anode and a cathode assembly. An amplitude and a rise time of the voltage pulse are chosen to increase a density of ions enough to generate sufficient thermal energy in the sputtering target to cause a sputtering yield from the sputtering target to be non-linearly related to a temperature of the sputtering target. As described in the originally-filed specification with reference to FIG. 8, the sputtering yield is a function of the temperature of the target in a thermal sputtering process according to the present invention.